

THE CITY OF SAN DIEGO  
M E M O R A N D U M

COUNCILMEMBER  
DONNA FRYE  
SEP 26 2008  
RECEIVED

DATE: September 26, 2008  
TO: Councilmember Donna Frye  
FROM: Jay M. Goldstone, Chief Operating Officer  
SUBJECT: Mission Bay Unidentified Pollution

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This is in response to your memorandum of September 24, 2008 to Mayor Jerry Sanders. First of all, I wish to make it very clear that we share in your concern of the ongoing pollution that has adversely impacted water quality in Mission Bay, especially around Fiesta Island and DeAnza Cove. Staff is in the process of identifying the source of the unusual material washing up to the shoreline at Fiesta Island and DeAnza Cove. We have a consultant, Weston, that is performing testing of the material to determine if it is of human or non-human origin. The results of that testing should be received later today. Once we have the results, we will share them with you and the rest of the City Council. Also, Metropolitan Waste Water Department (MWWD) has arranged to have one of its ocean-monitoring vessels take samples from the Bay bottom at various locations off Fiesta Island in an effort to identify the source of the material.

Thus far, there has been no evidence that illegal dumping is the source of this material in Mission Bay. The Police Department has assigned personnel to follow up on any leads. The lifeguards are also actively monitoring activities on the water and will continue as we try to identify the source of this material.

Attached is a preliminary chronological report by staff biologists in the Storm Water Department through Tuesday, September 23. It provides an overview of activities by the City and the County Department of Environmental Health.

With respect to posting adequate signage, City staff have been working with the County of San Diego to ensure that there is sufficient signage posted warning of water quality problems in all areas where tests indicate the water is contaminated. We will await test results from Weston, along with the sampling results from MWWD, to determine what additional steps, if any, should be taken to warn the public.



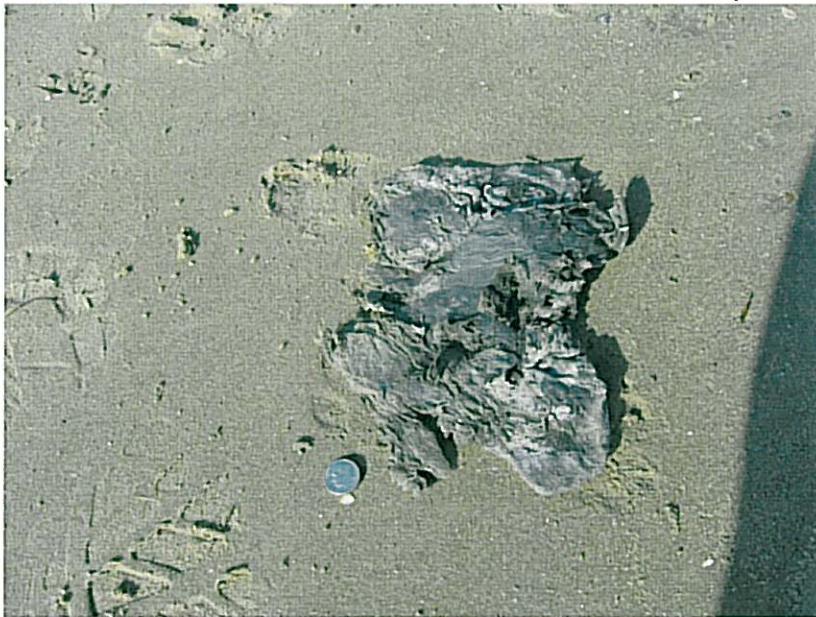
 Jay Goldstone

Attachment: Preliminary Chronological Report

cc: Mayor Jerry Sanders  
City Councilmembers  
Andrea Tevlin, IBA

## Summary of Events from DEH

On Monday, September 15, DEH received a call from the Mission Bay Park Rangers forwarding a citizen complaint they received of unknown grey blobs (6" x 6") along the tide line of the western shore of Fiesta Island. DEH staff investigated twice that day. The first investigation did not find the unknown material. The second investigation at 5:00 PM found only one example of the unknown material about 100 yards south of the northern fence boundary of the dog run area. There were tire tracks from a large vehicle (truck) that had driven down to the beach near the dog fence boundary. The material was fibrous and had a pungent odor of sewage. This sample was placed in de-ionized water at the County of San Diego, Public Health Laboratory (PHL) on Tuesday morning, September 16 for a few hours and then a water sample was collected for bacterial analysis.



On Tuesday late afternoon, September 16, DEH Environmental Health Specialist Ewan Moffat returned to Fiesta Island and surveyed the northern shoreline on Fiesta Island. He found about a dozen examples of the unknown material along the tide line on the NNE shoreline and north shoreline just before dark.

City of San Diego Parks & Recreation Maintenance staff reported they used a mechanical tractor with grooming rake to clean the tide line area of debris on Tuesday, September 16.

On Wednesday morning, September 17, Mr. Moffat returned to the northern shoreline and used a shovel to move the unknown material above the tide line and the bay water near the shoreline. Starting on Fiesta Island opposite the Visitor's Center and going north, Mr. Moffat counted 70+ examples of the unknown material. Kacey Shangles from the City of San Diego, Point Loma

Wastewater Treatment Plant met with DEH at Fiesta Island. Ms. Shangles said the unknown material does not look the same as bar and girt screen solid debris from a sewer treatment facility, nor does it resemble sewage sludge. (Sludge drying operations on Fiesta Island stopped in 1998.) **Ms. Shangles thought the material looked like solid sewage debris commonly found in septic systems and sewer pump out trucks (for porta-potties). The suspected source of the unknown material on Fiesta Island is illegal disposal of solid sewage debris from a sewer pump out truck.**

City of San Diego departments are providing the following actions. 1. City of San Diego Mission Bay Park Maintenance are scheduling another grooming of the Fiesta Island shoreline today. 2. City staff will also inspect adjacent Mission Bay shorelines to determine if more of the material has impacted those beaches. City staff found material on the eastern shoreline of Mission Bay from DeAnza Cove south to Tecolote Shores. 3. City staff are also making arrangements to remove and properly dispose of the unknown material that has been collected so far. 4. City of San Diego Stormwater staff are collecting 10 water samples from the northern shoreline of Fiesta Island to analyze for bacterial indicators. Results from these will be available on September 18.

Sept 19, City SD Parks & Rec Shoreline Maintenance staff continued to find the unknown material on the western shoreline of Fiesta Island. This shoreline had been mechanically raked twice since Sept 17. The new material was removed. City SD Parks & Rec Shoreline Maintenance staff reported the amount of material removed today was comparable to that first removed on Sept 17, and that some of the examples of material were larger. Crews noted finding more in the De Anza Cove area on the evening of Sept 18. The source is still unknown.

City SD Metropolitan Wastewater Dept (MWWD) crews have checked sewer pump stations and storm drain interceptors surrounding Mission Bay for the last two evenings and reported nothing unusual. MWWD has not reported any flow volume irregularities in sewer lines.

Additional samples of the material were delivered to the City Marine Microbiology Lab for dry weight/ gram analysis. And the County of San Diego PHL will identify the species of enterococci found in the Sept 17 sample.

Results from bay water samples collected by DEH on September 18 showed a mix of low bacterial levels, elevated within standards, and exceeding standards.

Results from bay water samples collected by DEH on September 19 (available on Sept 20) will be used to determine if the water contact closure remains in effect, is lifted or modified.

**Summary of Events for the City of San Diego Stormwater Dept.**



Wednesday morning, September 17, Stormwater Biologist Patricia Ten Boom collected 10 receiving water samples from the northern shoreline of Fiesta Island to analyze for bacterial indicators at the Marine Microbiology Lab (MML). All but 2 of the samples showed low levels of bacteria. Fiesta Island-2 and Fiesta Island-3 samples exceeded the action levels for Enterococcus. DEH closed the beaches on and around Fiesta Island.



## Beach and Bay Status Report Water quality closures and advisories for San Diego County Beaches

**Closures:** These beaches are closed to water contact due to possible sewage contamination.

Mission Bay

Station: all PWC and waterski areas between the east Mission Bay boat dock and Vacation Isle, Ski Beach. Swimming beaches at De Anza Cove, Campland On The Bay, north Crown Point, Visitor's Center beach, and Leisure Lagoon.

Status Since: Sept 17. Visitor's Center beach and Leisure Lagoon since Sept 18.

Reason: Suspected illegal disposal of sewage solid debris on the western shoreline of Fiesta Island

**Table 1 Action Level Criteria for Receiving Water and Storm Drains**

Indicator	Receiving Water Criteria (Rec-1)	95th Percentile Storm Drain Criteria based on FY 07-08 data	95 <sup>th</sup> -Percentile Storm Drain Criteria for 2008-09
Total Coliform	10,000 MPN/ 100 mls	1,600,000 MPN/100 ml	160,000 MPN/100 ml
Fecal Coliform	400 MPN/ 100 mls	66,500 MPN/100 ml	18,755 MPN/100 ml
<i>Enterococcus</i>	104 MPN/ 100 mls	23,427 MPN/100 ml	17,820 MPN/100 ml

\*95<sup>th</sup> percentile action levels are recalculated annually.

**Table 2: Receiving Water Sample Results**

SAMPLE			COLIFORM* CFU/100 mL		ENTEROCOCCUS** CFU/100 mL
DATE	TIME	ID	TOTAL	FECAL	
17Sep08	1112	Fiesta Island-1	<200	42	52
	1119	Fiesta Island-2	ND	180e	130e
	1124	Fiesta Island-3	ND	100e	240e
	1129	Fiesta Island-4	ND	50	32e
	1134	Fiesta Island-5	ND	16e	14e
	1141	Fiesta Island-6	<200	20e	2e
	1146	Fiesta Island-7	200e	80e	22e
	1151	Fiesta Island-8	200e	320e	30e
	1156	Fiesta Island-9	<200	16e	30e
	1201	Fiesta Island-10	<20	2e	4e

ND No data; non-coliform count is greater than 200 colonies per plate.

\* Method Used; Membrane Filtration (MF) - SM9222 B (Total Coliforms); SM9222 D (Fecal Coliforms)

Thursday, September 18, Ms. Ten Boom met with Mr. Moffat from the DEH at De Anza Cove where a large volume of the material was found that morning. The material had mostly been removed by Park and Rec. staff. We inspected the southern shore of De Anza Cove facing Fiesta Island and found a few examples of the material still floating near the shore. Ms. Ten Boom also inspected the shoreline of Rose Creek inlet north to Garnet Avenue. A few small pieces of the material were found floating along Rose Creek inlet's eastern shore up to Mission Bay Drive. No material or possible sources for the material were found further upstream.

Friday, September 19, Ms. Ten Boom inspected the western shore of Fiesta Island from the northern fence of the dog run area south to Stony Point. The three storm drains along the shore were dry and showed no signs of the material. Four samples of the solid material were collected for gram dry weight analysis at the Marine Microbiology Lab. Two of the samples, Fiesta Island-A and Fiesta Island-B, were collected from the pile that had been raked off the Fiesta Island beaches before the pile was hauled away in dump trucks. Two fresh samples, Fiesta Island-C and Fiesta Island-D, were later collected from material found floating along the northeastern shore of Fiesta Island. The bacteria results for both of the floating samples were below the action levels.

### Table 3: Solid Sample Results

SAMPLE				COLIFORM* CFU/gdw		ENTEROCOCCUS** CFU/gdw
DATE	TIME	ID	%TS	TOTAL	FECAL	
19Sep08	1008	Fiesta Island-A	58.1	ND	2,100	21,000
	1010	Fiesta Island-B	32.6	ND	<200	120e
	1134	Fiesta Island-C	10.8	<2,000	<200	<200
	1149	Fiesta Island-D	8.78	<2000	<200	<200

\* Method Used; Membrane Filtration (MF) - 9222 B (Total Coliforms); 9222 D (Fecal Coliforms)

\*\* Membrane Filtration (MF) - EPA 1600

SAMPLE				COLIFORM* MPN Index/gdw		ENTEROCOCCUS** MPN Index/gdw
DATE	TIME	ID	%TS	TOTAL	E. COLI	
19Sep08	1008	Fiesta Island-A	58.1	1,900	1,600	14,000
	1010	Fiesta Island-B	32.6	51,000	4,300	<1000
	1134	Fiesta Island-C	10.8	<100	<100	<100
	1149	Fiesta Island-D	8.78	<100	<100	<100

\*MPN method: IDEXX Colilert using IDEXX Quantitray

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**All results are reported in term of gram dry weight (gdw).**

Monday, September 22, Stormwater Biologists Jessica Erickson and Ms. Ten Boom inspected the western shore of Fiesta Island from the northern boundary fence of the dog run area south to Stony Point. A cluster of dense gray claylike material was found 100 yards south of the northern boundary fence. This material did not float and was not fibrous or smelly like the majority of the unknown material found around Fiesta Island. Some of the chunks had dried plant material throughout. We spoke with a number of the remaining people who had camped on the western shore of Fiesta Island during the past week and there were no sightings of possible illegal dumping on the beach save for one RV dumping its waste. The volume of material found does not seem likely to have come from a single RV. We also inspected the shoreline around Hidden Anchorage and southwest to Stony Point. We did not find any material and the stormdrains in the area were dry. We did meet Jim Singleton walking his dog along Hidden Anchorage and he claims to have been the man to first report the material. He also said that he had seen this same material last year in late August and September.

Photo of clay-like material



Tuesday, September 23, Stormwater biologist Jason Edwards has contacted other departments to help identify the unknown material and is scheduling Weston to test the material to determine if it is human or non-human sewage. Biologist Jessica Erickson is inspecting the eastern shorelines of Crown Point and Vacation Isle as we continue to search for a possible source of the material. The Park and Recreation Department reported that the volume of material was heavy on Saturday, September 20 and has been light Sunday and Monday. They have returned to routine cleaning and have not found any material today.



